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# PDF TRACKING FORM

Tracking Job Number	141		Printed: 5/28/2002	
Document Title	Children in the Oregon Health Plan: How	Have They Fared	?	
Author	Janes Mitchell, Susan Haber, Galina		Document Date 20-Jan-00	
Document Description:	Interim Substantive Report			
	•			
Project Specifics			****	
SR Number	94-127			
Project Number	500-94-0056			
Project Title	Evaluation of the Oregon Medicaid Dem	onstration		
Awardee	Health Economics Research			
Project Officer	Boben, Paul			
Principle Investigator	Mitchell, Janet			
Funding Level	5107623			
Start Date	9/30/1994			
End Date	6/30/2001			
Project Description:	The objectives of the Oregon Medicaid F	Reform Demonstra	tion (also known as the	
	Oregon Health Plan, or OHP) were to income to affordable health care services and to	crease the number contain State and I	Federal expenditures for	
	health ca			
Initiated (CMS): sgallowa	Date: 28-May-02	Accepted (IQ):	Date:	
Released (IQ):	Date:	Received (Sub):	Date:	
Finished (Sub):	Date:	QC'd (IQ):	Date:	
Returned (IQ):	Date:	pproved (CMS):	Date:	

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Keywords: Medicaid managed care, access to care, children's health insurance

Words: 4,732

Abstract Words: 250

#### Abstract

Background. The Oregon Health Plan (OHP) is an innovative Medicaid demonstration that

both enrolls beneficiaries in managed care, and uses a priority list to define the benefit package.

Objectives. This study seeks to evaluate the impact of OHP on children's access to care.

Research Design. A telephone survey was conducted in 1998 of two groups of children: OHP enrollees and Food Stamp recipients not enrolled in OHP. The Food Stamp sample included both privately insured and uninsured children. This allowed us to disentangle the insurance effects of OHP from other effects such as its reliance on managed care and the priority list.

Comparisons included: usual source of care, travel and waiting times, utilization on health care services, unmet need and satisfaction with care.

Results. Much of OHP's impact has been realized by the simple extension of health insurance coverage to Oregon's low-income children. The availability of insurance significantly increased the use of physician visits and dental care. OHP children were more likely to report an unmet need for prescription drugs, however, largely due to managed care plans' formularies. The priority list had little effect on children, affecting only 2 percent of children surveyed, most of whom succeeded in getting the service anyway.

Conclusions. Despite the negative publicity prior to its implementation, there is no evidence that "rationing" under OHP has substantially restricted access to needed services for children. OHP children appear to enjoy access equal to that of low-income children with private insurance, and far greater access than the uninsured.

The Oregon Health Plan (OHP), Oregon's innovative Medicaid 1115 waiver program, was implemented over six years ago in February 1994. It had been preceded by considerable controversy over its use of a prioritized list of services to define the program's benefit package. In fact, the controversy had been so great that approval of Oregon's waiver was delayed for two years. Of particular concern was the notion that the "rationing" of services via the priority list would be applied only to some of the most vulnerable residents of the State, e.g., poor women and children. Under Oregon's priority list, paired medical conditions and treatments are ranked hierarchically from most to least medically necessary. Covered services are those at or above a cut-off line that is established based on the State's budgetary resources. Critics worried whether Medicaid beneficiaries in Oregon would receive the care they needed, or whether they would be denied medically necessary services because the services were "below the line".

Despite the considerable publicity that preceded its implementation, little is known about how the Oregon Health Plan has impacted the services that Medicaid beneficiaries receive in the State. In this paper, we focus specifically on access to care for children. (A companion paper examines access to care for adults.) This focus is particularly appropriate as it was a 7-year old boy needing a bone marrow transplant who triggered the state-wide discussions that eventually resulted in the Oregon Health Plan. Faced with a budget crisis in 1987, the Oregon Medicaid program had earlier rescinded coverage for organ transplants (an optional Medicaid service under federal regulations), and the boy died as a result.<sup>1</sup>

Under its waiver, the Oregon Health Plan not only introduced the priority list, but two other innovations that may impact access to care. First, OHP expanded Medicaid eligibility to cover all uninsured residents up to 100 percent of the Federal Poverty Level (FPL). The vast majority of these expansion beneficiaries are adults, as the earlier SOBRA expansions had

already covered most children under the poverty level. However, older teen-agers (children born prior to September 30, 1983), who were not eligible under SOBRA, could now be covered under OHP. Second, nearly all OHP children have been enrolled in capitated managed care plans. Since each one of these three OHP components may have an effect on access to care, any evaluation of OHP must ideally try to disentangle the differential effects.

How might these different components of OHP affect access? Eligibility expansion is expected to improve access, as previously uninsured teenagers presumably faced difficulties obtaining care. Previous research has clearly shown that extending health insurance to the uninsured increases utilization of physician and other services. 6-10 The net effects of managed care and the priority list are less clear. OHP children enrolled in managed care plans may encounter barriers to services requiring prior authorization by their primary care physician, such as specialist referrals. Studies conducted during the early years of Medicaid managed care did find evidence of reduced specialist visits, 11-12 although a more recent study in rural Minnesota found no differences in use of specialists (or any other services) between children enrolled in managed care vs. fee-for-service. 13 On the other hand, enrollment in a plan and assignment to a primary care provider may assure access to a usual source of care, at least for adults. 14-15 The impact of the priority list is similarly difficult to predict a priori. While implementation of the priority list may restrict access to those services that are below the line, the list itself is based on a far more expansive list of services than had been covered under Oregon's traditional Medicaid program. Newly covered services for children include organ transplants and a richer set of mental health benefits.

In this paper, we evaluate OHP's impact on access for traditional AFDC (now TANF) and SOBRA children as well as those children covered under the expansion program. These

eligibility groups were among the first to be enrolled in OHP in February 1994. Thus, by the time of our survey (1998), OHP was a mature health program, having served these eligibility groups for four years.

# Methods

# **Evaluation Design**

The ideal quasi-experimental design would consist of pre and post-OHP measures of access for both OHP children and a comparison group of non-OHP children. Unfortunately, it was not possible to collect baseline measures of access prior to implementation of OHP. Instead, we adopted a simple point in time comparison of OHP children and a comparison group. Our OHP sample of children lived in families with incomes up to 100 percent of FPL, except for those aged 5 years and under who could have incomes up to 133 percent of FPL. (The SOBRA legislation raised the eligibility ceiling for pre-school children.) Our comparison group of children were Food Stamp recipients, excluding those also enrolled in OHP. The Food Stamp eligibility ceiling is 130 percent of FPL, so our comparison group presumably has average incomes reasonably similar to those of OHP children.

#### Sample Selection

Samples of children aged 1 to 17 were selected from both the OHP and Food Stamp populations. State eligibility files for both programs were used to construct the sampling frames. There were considerable difficulties and twelve months of negotiations before gaining the State's permission to use the Food Stamp eligibility file for sampling purposes. Over the course of this year, the Food Stamps office in Oregon switched from the traditional method of mailing food stamps to recipients each month to an automated debit card system that kept track of recipients'

"accounts". Under the debit card system, a recipient no longer needed to maintain current address information with the State in order to receive food stamp benefits. This made it much more difficult to locate the Food Stamp sample as will be seen below.

# **Data Collection and Sample Sizes**

The survey was conducted by telephone, using computer-assisted telephone interviewing (CATI) techniques in 1998. All interviews were conducted with an adult informant, usually the child's parent.

A total of 351 OHP children and 137 Food Stamp recipients responded to the survey, with response rates of 67.2 percent and 38.2 percent, respectively. Despite extensive tracing, many Food Stamp sample members could not be located. Low-income populations generally tend to be highly mobile and often do not leave forwarding address information.

The response rate for the OHP sample is as high (or higher) than those achieved in other published surveys of Medicaid populations, <sup>14-15</sup> while the response rate for the Food Stamp sample is only two-thirds as high. Because data collection and tracing procedures for the OHP and Food Stamp samples were identical, it would seem that the difference in their response rates can be attributed to the poorer quality of the addresses in the Food Stamp eligibility file. Furthermore, when located, almost all eligible respondents participated in the survey; only 3 percent of sampled parents refused to participate. For these reasons, we do not believe that any systematic bias has been introduced as a result of this low response rate.

Among the 137 Food Stamp recipients, the majority (62% or 97) of the Food Stamp comparison group had private health insurance, almost always through a parent's employer. The remaining 40 children were uninsured, and most of their parents reported that they simply could not afford health insurance.

The availability of both insured and uninsured Food Stamp children effectively provides us with two comparison groups. Comparison of OHP children with uninsured Food Stamp recipients allows us to evaluate the impact of OHP on access, relative to no insurance whatsoever. Because of the small number of uninsured children, however, we may have insufficient power for some analyses. Comparison with insured Food Stamp recipients allows us to evaluate OHP's impact, relative to that of private insurance. This latter comparison will capture differences between OHP and commercial health insurance, such as the priority list and the use of managed care.

#### Statistical Tests

Chi-square tests were used to determine the statistical significance of all categorical variables, and t-tests for continuous variables. Logistic regression was used to evaluate OHP impacts, while adjusting for confounding variables like health status. Due to the complex sample design, weighting and standard error adjustments were made using SUDAAN for all analyses.

# Results

#### Descriptive Findings

Sociodemographic Characteristics and Health Status

Table 1 compares sociodemographic characteristics and health status of OHP children with insured and uninsured Food Stamp recipients. OHP children were significantly younger on average than Food Stamp children, reflecting the expanded Medicaid eligibility for children under 6 (up to 133% of FPL). Almost two-fifths of OHP children (39%) were 5 years of age or under, compared with only 25 percent of Food Stamp children. There were no differences in

gender. Reflecting the population of the State as a whole, the vast majority of parents of both OHP and Food Stamp children reported that their children were white and non-Hispanic.

There were no significant differences in marital status between the parents of OHP children and those of Food Stamp children. Parents of Food Stamp children were significantly more likely to be "currently employed in a job for pay" and were better educated, however, compared with the parents of OHP children.

There were few differences in health status between OHP and Food Stamp children, although parents of insured Food Stamp children were more likely to report their child's health as "excellent". (Only a single child was reported as being in poor health; hence the "fair" and "poor" categories have been combined.)

Usual Source of Care and Travel/Waiting Times

OHP children were significantly more likely than uninsured Food Stamp children to report that they had a usual source of care, i.e. "a place they usually go to when they are sick or need advice about their health" (Table 2). The very high rate among insured Food Stamp children of having a usual source of care is somewhat surprising, as we had hypothesized that rates would be highest for OHP children given their greater enrollment in managed care plans. Almost all of the OHP children (94%) were enrolled in a managed care plan, compared with less than two-thirds (62%) of the insured Food Stamp children (data not shown). Among those with a usual source of care, the majority of all children went to a doctor's office or HMO. However, uninsured Food Stamp recipients were significantly more likely to go to a hospital emergency room or "other" type of setting, generally a public health or community health clinic. Among those with a usual source of care, OHP children were significantly more likely than uninsured

Food Stamp children to report that they had a usual health care provider, i.e., "a particular doctor or other medical person that they usually see at this place".

All respondents with a usual source of care were also asked about travel and waiting times to this usual source. As a rule, there were few differences between OHP children and those in the two comparison groups. Uninsured Food Stamp children did report somewhat longer waits in the waiting room and exam room before seeing a doctor or other medical person, presumably because they were more likely to use the hospital ER as their usual source of care.

Utilization of Health Care Services

As a rule, utilization of health care services by OHP children is similar to that of insured Food Stamp children, and higher than that of uninsured children (see Table 3). In some instances, such as physician visits, this may reflect the relatively larger number of very young children in the OHP sample. Young children generally use more health care services than older children, because of the need to receive immunizations and the like. Regression analyses shown later will allow us to hold age constant, as well as health status and other factors affecting utilization.

The majority of OHP and insured Food Stamp children had seen a physician in the past three months (60% and 64%, respectively), compared with only 35 percent of uninsured children. For those with at least one visit, there were no differences in the number of physician visits during this three-month period (data not shown).

Once immunizations are complete, healthy children are unlikely to visit the physician more than once a year, however, and the percent with a physician visit in the past twelve months may be a more reasonable measure for comparison. Although the utilization gap is definitely narrowed, OHP and insured Food Stamp children were still significantly more likely to have seen

a physician at least once during the past year, compared with the uninsured. When asked specifically about *preventive* visits during the past twelve months, however, the gap widens again. OHP and insured Food Stamp children were twice as likely to receive a routine physical or check-up (65-70%), compared with uninsured children (33%). Similarly, these two groups of insured children were twice as likely to have seen the dentist over the past year, compared with uninsured children.

OHP children were significantly more likely to have received a prescription for medicine over the past year, compared with both groups of Food Stamp children. The differences in use are quite high; 73 percent of OHP children got a prescription, compared with 55 percent of insured Food Stamp children and only 38 percent of those without insurance. Finally, there were no differences across groups in ER visits, use of specialists, hospital admissions, or mental health/substance abuse treatment.

#### Unmet Need

While OHP children report receiving more health care services than the uninsured, they may still not receive as many as they need or they may encounter difficulties trying to obtain the services they do receive. Parents were asked how easy or hard it was to get the care they thought their child needed over the last 12 months. As shown in Table 4, about three-quarters of both OHP and insured Food Stamp parents reported that it was somewhat or very easy to get the care their child needed. By contrast, a significantly smaller number of uninsured parents (27%) found that care was easy to get. Note in particular the substantial number of uninsured parents (44%) reporting that it was "very hard" to get care (compared with 3% and 0%, respectively, for OHP and insured Food Stamp parents).

Parents were also asked if there was any time during the past 12 months when their child needed a specific service, but was not able to get it. Those replying "yes" (needed but did not receive the service) were then asked why their child did not get the service. These questions were asked for three services: (1) visit to a medical specialist; (2) visit to a dentist or dental hygienist; and (3) prescription medicine.

Relatively few OHP parents reported that their child had needed one of these services but was not able to, significantly fewer than uninsured Food Stamp recipients. These parents of uninsured parents overwhelmingly reported that it "cost too much" as the reason they were unable to obtain care for their children Parents of OHP children not receiving needed services usually cited an inability to find a provider or an unwillingness by the plan or primary care provider to approve the needed service.

Of course, in some cases OHP children may not receive needed services because these services fell "below the line" of the priority list. A separate question in this same survey allowed us to examine this directly, as described in the following section.

#### Uncovered Services under OHP

All OHP respondents were asked the following question: "As you may know, OHP doesn't pay for all treatments. During the past 12 months, has OHP ever refused to pay for care that your child's doctor said your child needed?" Parents answering "yes" were then asked the following two open-ended questions: "What treatment was it?" and "Why wouldn't they pay for it?" Using the verbatim responses to both questions, we categorized each child reporting an uncovered service along two dimensions: (1) the reason for the denial; and (2) the type of service, etc.

Ten percent of OHP parents reported that OHP had refused to pay for a treatment that their child needed. In about one-fifth of these cases, or 2.3 percent of children, the treatment was denied because it was below-the-line. By contrast, a similar survey of adults found that a significantly higher number –10 percent--reporting that OHP would not pay for a service because it was below-the-line. Among most of the remaining cases of uncovered services, the treatment was denied because of managed care plan policies and procedures.

Prescription drugs were by far the most common uncovered service, accounting for 45 percent of all services reported as being denied by OHP. In some instances, the drug treatment was below-the-line and not covered. In most other cases, the managed care plan would not approve a specific brand-name drug or did not include that drug in its formulary.

OHP parents reporting an uncovered service were asked if their child "got the service anyway". About one-half (55%) of children ended up getting the service anyway, including 61 percent of those whose treatment was denied because it was below-the-line. In most of these cases, the parents paid for the treatment themselves. Of those children who did not get the service anyway, one-half of their parents reported that their health had gotten worse as a result (but the actual number of such children in our sample was small: 6 children in all).

#### Satisfaction with Care

Parents were asked to rate their satisfaction with a wide range of factors associated with their children's care, including their ability to see a given doctor, availability of after-hours care, availability of information and advice by phone, travel and waiting times, amount of time spent with the doctor, their ability to see a specialist when needed, and the overall quality of care. Parents of OHP children were as satisfied as parents of insured Food Stamp children along all of these dimensions (analysis not shown). The vast majority of both groups of parents reported that

they were "very" satisfied with the quality of care, for example (72% of OHP parents and 64% of insured Food Stamp parents). Similarly, over three-quarters of these groups of parents rated their child's ability to see a specialist when needed as "good", "very good", or "excellent". By contrast, parents of uninsured children were far less satisfied. About one-half of these parents (48%) were "very" satisfied with the quality of their children's care, and only a third rated their ability to see a specialist as "good" or better.

#### Regression Analyses

Empirical Specification and Estimation

The descriptive results shown earlier demonstrated marked differences in utilization, with OHP and insured Food Stamp children using more health care services than uninsured children. However, OHP children were significantly younger compared with the two groups of Food Stamp recipients, a factor that might explain their higher use rates. In order to test the impact of OHP on access and utilization, we used regression analysis to hold these and other covariates constant. Because all of these dependent variables are bivariate, logistic regression was used for estimation.

Two variables were used to capture the impact of OHP: (1) a health insurance dummy set equal to one for both OHP children and Food Stamp children with health insurance; and (2) an OHP dummy variable set equal to one for OHP children only. The health insurance dummy variable captures the effect of being insured on access and use. The OHP variable captures aspects of OHP above and beyond the program as a health insurance plan *per se, e.g.*, OHP's use of the priority list and its greater reliance on managed care.

Covariates included sociodemographic and health status characteristics expected to influence demand for health care services. These included gender, race, and age, parent's education and employment status, child's health status, and geographic residence.

In the tables that follow, we present the odds ratios only for the two OHP impact variables (health insurance coverage and OHP) in order to focus the presentation. When significant, the covariates are nearly always in the expected direction, e.g., children in poorer health are more likely to utilize services and are more likely to report unmet need for services. (The complete regression results are available from the authors upon request.)

Results

Table 5 displays odds ratios for all of the utilization equations. The availability of health insurance has a powerful effect on the utilization of many medical care services. Children with health insurance, whether OHP or private, were significantly more likely to have visited a physician in the past three months (as well as the past year), to have received a routine exam, and to have seen the dentist. The absolute magnitude of the impact is considerable; insured children were six times as likely to have visited the physician over the past year, for example, compared with uninsured children. Health insurance coverage had no effect on the odds of the remaining services.

As seen by the OHP variable, children enrolled in OHP were more than twice as likely to have received prescription medicine over the past year, compared with other children. This increased use is almost certainly due to OHP's coverage of most prescription drugs, unlike many private insurance plans that either do not cover drugs or impose hefty copays.

OHP children were significantly less likely to have visited a specialist over the past year, compared with other children (both insured and uninsured). One possible explanation could be

that primary care physicians in OHP plans are restricting access to specialists; recall that OHP children were much more likely to be enrolled in managed care plans than were privately insured plans. However, as seen in Table 6, OHP enrollment does not raise the odds of unmet need for specialist care. One alternative explanation for the lower use of specialists by OHP children may be due to less need by these children for specialty care. Our measure of health status may have failed to capture some dimension of children's health correlated with OHP enrollment. A second explanation could be that specialist visits by Food Stamp children is unnecessarily high, and that OHP primary care physicians have been appropriate in restricting access to specialists.

Children with insurance, whether OHP or private, were significantly less likely to report an unmet need for a specialist visit, dental care, or prescription medicine (Table 6). OHP enrollment had an offsetting effect on unmet need for prescription medicine (albeit only at the 10 percent level). OHP children were more likely to have needed prescription medicine at some point in the past year, but did not receive it.

# **Conclusions and Policy Implications**

#### Summary of Results

There are three principal components of the Oregon Health Plan that may affect access to care: (1) eligibility expansion; (2) mandated managed care enrollment; and (3) the priority list. We summarize our principal findings around each of these components.

#### Eligibility Expansion

Much of OHP's impact has been realized by the simple extension of health insurance coverage to Oregon's low-income children. The availability of health insurance coverage significantly increased utilization of many health care services, particularly physician visits

(including preventive visits), and dental care. Much of this impact predates OHP, and results from the SOBRA expansions of 1991. Nevertheless, OHP did extend coverage to older teenagers, and 5 percent of our sample were adolescents who would not have been eligible absent OHP.

# Managed Care

Like many state Medicaid programs, Oregon has chosen to mandate managed care enrollment for both its traditional and expansion beneficiaries. As noted earlier, research to date comparing Medicaid managed care vs. fee-for-service has been ambiguous, with early studies finding access to some services restricted under managed care, such as specialists, <sup>11-12</sup> but with more recent studies finding no real differences between managed care and fee-for-service children. <sup>13</sup> Even though OHP children were far more likely than privately insured Food Stamp children to be enrolled in a managed care plan (94% vs. 62%), we detected few differences between the two groups of children that could be attributed to managed care. OHP children and privately insured Food Stamp children were equally likely to have a usual source of care and to have received preventive care. However, OHP children were more likely to report an unmet need for prescription drugs, a fact which we attribute in large part to the formularies of managed care plans.

#### Priority List

The use of a priority list to define the Medicaid package is the single most distinctive aspect of the Oregon Health Plan. As noted above, OHP children reported higher levels of unmet need for prescription drugs. While this was largely due to managed care plans' formularies, some of the prescription drugs needed by OHP children were denied because they were below-the-line.

What has been the <u>overall</u> impact of the priority list on children enrolled in OHP? Compared with OHP adults, <sup>16</sup> a relatively small number of children appear to be affected; two out of every hundred OHP children surveyed (2.3%) reported that they had needed a treatment that OHP would not pay for because the service was below-the-line. However, the majority of these children ended up getting the service anyway, usually because their parents paid for it. We do not know the size of these out-of-pocket payments, or what financial burden they imposed on families. Given the low incidence of treatments denied because they were below-the-line, we would need a much larger sample in order to detect any adverse health impacts on those children who did not receive the service.

#### **Study Limitations**

The lack of baseline measures of access for our OHP and comparison children is a definite limitation of this evaluation. If OHP and Food Stamp children differ in ways that are correlated with their use of health care services, then our estimated OHP effect will be biased. OHP children were more likely to be aged 5 and under, and this age group uses more services than other children. However, we have controlled for age in our multivariate analyses. Perhaps more problematic are our small sample sizes, especially for Food Stamp children. Nonetheless, the findings reported in this paper are consistent with those found for a similar study of adults that had much larger samples of both OHP and Food Stamp recipients.<sup>16</sup>

#### Policy Implications

OHP was implemented in February 1994, following a barrage of negative national publicity about the program, all of it focussed on the use of a priority list to set benefit levels. Critics were concerned that "rationing" under the priority list would restrict access to needed services. Four years later by the time of this survey (1998), OHP children appear to enjoy access

equal to that of low-income children with private health insurance, and far greater access than the uninsured.

Much of the enhanced access results from the SOBRA eligibility expansions that predate OHP by many years. Similarly, greater use of prescription drugs compared with privately insured Food Stamp children reflects the more generous benefit package of state Medicaid programs generally rather than OHP *per se*.

Compared with OHP adults, the impact of the priority list on children has been relatively minor. Why do OHP children seem less likely to be affected by the priority list? While we do not know for sure, we can speculate on several reasons. First, there appear to be fewer below-the-line treatments that affect children, relative to adults. Second, physicians and managed care plans may be less likely to deny treatment when a child is involved. Services covered under the priority list form the basis for the capitation rates, but plans and providers are free to provide services as they deem appropriate. Anecdotal evidence suggests that below-the-line services are being provided in instances of medical necessity or in the name of community relations. One managed care plan, for example, opted to pay for infant circumcision (a below-the-line service) in order to keep their pediatricians happy.

It should be noted that our results reflect the experience of the majority of, but not all, OHP children. Beginning in February 1995, disabled children on SSI were also enrolled in OHP. Some of the most vocal criticism of the priority list has focussed on its application to a disabled population. The special health care needs of the disabled may make them particularly vulnerable when services are denied. A new survey of disabled children (conducted in 1999) will allow us to evaluate whether the priority list (or any other component of OHP) has had a differential impact on access to care for these children.

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# Acknowledgements

The research presented in this paper was performed under Health Care Financing Administration (HCFA) Contract No. 500-94-0056. The statements contained in this paper are those of the authors and no endorsement by HCFA should be inferred or implied. This paper was presented at the Annual Meeting of the Association for Public Policy Analysis and Management, Washington DC, November 5, 1999 and the American Economics Association, Boston, MA, January 9, 2000.

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Table 1
Sociodemographic Characteristics and Health Status

	ОНР	Food Stamp Recipient	
•		Insured	Uninsured
Mean Age (years)	7.6	8.7*	9.8**
Female (%)	48.6	44.1	51.3
Parent Married (%)	38.5	45.3	49.8
Parent Employed (%)	45.8	73.0**	68.8*
Race/Ethnicity(%) <sup>a</sup>			*
White, non-Hispanic	73.6	81.7	82.3
Black, non-Hispanic	6.8	2.3	0.0
Hispanic	14.0	11.1	15.3
Asian	2.4	1.3	1.7
Native American	2.6	3.6	0.7
Other	0.6	0.0	0.0
Parent's Education(%) <sup>a</sup>		*	#
Less than high school	26.6	15.0	16.0
High school graduate	41.4	40.6	60.8
Some college/college graduate	31.9	44.4	23.2
Child's Current Health <sup>a</sup>		#	
Excellent	40.3	55.2	40.2
Very Good	40.7	33.9	33.0
Good	15.7	7.5	15.1
Fair/Poor	3.3	3.4	11.7

<sup>&</sup>lt;sup>a</sup> Percentages sum to 100 percent within category by column.

<sup>\*\*</sup> Significantly different from OHP sample at .01 level.

<sup>\*</sup> Significantly different from OHP sample at .05 level.

<sup>#</sup> Significantly different from OHP sample at .10 level.

Table 2
Usual Source of Care, Travel and Waiting Times

	ОНР	Food Stamp	Recipients
<del>-</del>			Uninsured
Has Usual Source of Care (% yes)	98.7	97.3	70.0*
For Those with a Usual Source, Type(%	o): <sup>a</sup>	#	**
Physician or HMO office	76.9	80.2	76.8
Hospital Clinic	17.3	9.3	2.0
Hospital ER	0.3	0.0	6.4
Other	5.5	10.6	14.8
For Those with a Usual Source, Has A			
Usual Health Care Provider (% yes)	85.0	88.4	59.6*
Travel Time (from home to usual			
source of care) a			
Less than 15 minutes	51.4%	39.5%	45.5%
15 to 30 minutes	5.8د	49.1	45.6
More than 30 minutes	10.1	11.4	8.9
Appointment Waiting Time (from time			
of call to visit for illness) <sup>a</sup>			
Don't make appointment, just walk i	12.2%	21.5%	12.4%
Less than 4 days	78.0	70.8	78.0
4 to 7 days	7.9	6.5	9.6
More than 7 days	1.9	1.1	0.0
Office Waiting Time (time in waiting a	nd exam		
rooms before seeing doctor) a			#
Less than 15 minutes	33.8%	22.6%	14.8%
15 to 30 minutes	48.1	62.6	57.5
31 to 60 minutes	17.1	13.9	7.2
More than 1 hour	1.1	0.9	20.6

<sup>&</sup>lt;sup>a</sup> Percentages sum to 100 percent within category by column.

<sup>\*\*</sup> Significantly different from OHP sample at .01 level.

<sup>\*</sup> Significantly different from OHP sample at .05 level.

<sup>#</sup> Significantly different from OHP sample at .10 level.

Table 3 **Utilization of Health Care Services** 

_	ОНР	Food Stamp Recipients	
		Insured	<u>Uninsured</u>
Percent With Visit in Past 3 Months:			
Physician Visit	60.1	64.3	34.7*
ER Visit	15.0	10.2	8.4
Percent with Use in Past 12 Months:			
Physician Visit	91.2	88.8	61.0*
Routine Physical/Check-up	64.5	69.8	33.2**
Visit to Specialist	18.5	27.2	19.7
Hospital Admission	4.1	7.2	1.7
Prescription for Medicine	72.7	55.0**	38.4**
Mental Health/Substance Abuse Treatment	8.0	6.1	13.1
Visit to Dentist	65.3	62.9	30.7**

<sup>&</sup>lt;sup>a</sup> Percentages sum to 100 percent within category by column.
\*\* Significantly different from OHP sample at .01 level.

<sup>\*</sup> Significantly different from OHP sample at .05 level.

<sup>#</sup> Significantly different from OHP sample at .10 level.

Table 4 **Unmet Need for Health Care** 

_	ОНР	Food Stamp Recipients	
-		Insured	Uninsured
How Easy/Hard Was It to Get Care You Think Your Child Needed? <sup>a</sup>		*	**
Very hard	3.0%	0.0%	43.5%
Somewhat hard	5.9	4.9	1.1
Somewhat easy	20.9	18.6	18.3
Very easy	55.4	54.4	8.7
Did not need care	14.7	22.1	28.4
Needed But Did Not Receive (% yes):			
Visit to Specialist	4.0	7.0	43.5**
Dental care	11.9	10.8	47.9*
Prescription medicine	9.3	5.0	24.2*

<sup>Percentages sum to 100 percent within category by column.
\*\* Significantly different from OHP sample at .01 level.</sup> 

<sup>\*</sup> Significantly different from OHP sample at .05 level.

<sup>#</sup> Significantly different from OHP sample at .10 level.

Table 5

Odds Ratios for Utilization Equations

	Health Insurance	<u>OHP</u>
Physician Visit in Past 3 Months	3.39*	0.77
Physician Visit in Past 12 Months	6.04*	0.88
Routine Exam	4.00*	0.73
ER Visits Past 3 Months	1.03	1.65
Specialist Visit	1.30	0.51*
Hospital Admission	3.54	0.57
Dentist Visit	5.65**	1.28
Prescription Medicine	1.60	2.27**
Mental Health/Substance Abuse Treatment	0.55	1.25

NOTE: Covariates include age, race, gender, health status, parents' employment status, parents' education, and geographic location.

<sup>\*\*</sup> Significant at .01 level.

<sup>\*</sup> Significant at .05 level.

<sup>#</sup> Significant at .10 level.

Table 6
Odds Ratios for Unmet Need Regressions

	Health <u>Insurance</u>	<u>OHP</u>
Specialist Visit	0.09**	0.55
Dental Care	0.16**	1.08
Prescription Medicine	0.15**	2.53#

**NOTE**: Covariates include age, race, gender, health status, parents' employment status, parents' education, and geographic location.

<sup>\*\*</sup> Significant at .01 level.

<sup>\*</sup> Significant at .05 level.

<sup>#</sup> Significant at .10 level.

Table A-1
Utilization Regression Results

	Physician Visit in	Routine	
	Past 3 Months	Past 12Months	<b>Exam</b>
Health Insurance	3.39*	6.04*	4.00*
OHP	0.77	0.88	0.73
Female	0.95	1.83	1.24
Age:	2.12	2 70**	3.58**
5 or less	2.13	3.70**	
6 to 12	1.06	1.44	1.30
White	1.18	1.17	1.04
Parent Employed	1.01	0.62	1.19
Parent's Education:			
College	1.13	1.65	1.10
High School Grad	0.65	0.76	1.02
Health Status:			
Good	1.48#	1.74	1.22
Fair/Poor	2.07	1.20	1.09
Residence:			
Urban (except Portland	) 1.40	2.00	0.83
Rural	1.10	1.12	0.80

Table A-1 (continued)

Utilization Regression Results

	ER Visits Past 3 Months	Specialist <u>Visit</u>	Hospital <u>Admit</u>
Health Insurance	1.03	1.30	3.54
OHP	1.65	0.51*	0.57
Female	0.85	1.08	0.25**
Age:			
5 or less	2.77*	1.34	2.03
6 to 12	1.04	1.29	1.63
White	0.95	0.84	0.30#
Parent Employed	1.38	0.80	2.35
Parent's Education:			
College	1.18	1.16	2.32
High School Grad	0.82	0.84	1.04
Health Status:			
Good	0.90	1.73#	1.39
Fair/Poor	3.24*	1.52	0.01
Residence:			
Urban (except Portland)	0.66	0.53#	1.71
Rural	0.98	0.77	1.79

Table A-1 (continued)

Utilization Regression Results

	Dentist <u>Visit</u>	Prescription <u>Medicine</u>	Mental Health/ Substance Abuse <u>Treatment</u>
Health Insurance	5.65**	1.60	0.55
ОНР	1.28	2.27**	1.25
Female	1.27	1.00	0.99
Age:	0.20**	2.42**	0.27
5 or less	0.29**	2.43**	0.37
6 to 12	1.20	1.51	0.92
White	1.18	1.00	1.59
Parent Employed	0.98	1.25	1.08
Parent's Education:			•
College	1.27	1.39	0.50
High School Grad	1.29	1.10	0.74
Health Status:	•		
Good	0.70	1.32	2.23#
Fair/Poor	1.75	1.08	2.41
Residence:		•	
Urban (except Portland)	0.68	0.83	0.85
Rural	0.44**	0.92	0.53

<sup>\*\*</sup> Significantly different at .01 level.

<sup>\*</sup> Significantly different at .05 level.

<sup>#</sup> Significantly different at .10 level.

Table A-2
Unmet Need Regression Results

	Specialist <u>Visit</u>	Dental <u>Care</u>	Prescription <u>Medicine</u>
Health Insurance	0.09**	0.16**	0.15**
OHP	0.55	1.08	2.53#
Female	0.63	0.91	0.93
Age:			
5 or less	0.68	0.61	0.89
6 to 12	1.56	1.09	1.27
White	0.91	1.17	0.92
Parent Employed	0.72	0.69	2.08#
Parent's Education:			
College	1.51	1.70	2.45
High School Grad	1.49	2.18	1.66
Health Status:			
Good	1.11	1.41	1.30
Fair/Poor	2.25	0.87	2.09
Residence:			
Urban (except Portland)	1.12	1.54	0.69
Rural	1.11	1.15	0.96

<sup>\*\*</sup> Significantly different at .01 level.

<sup>\*</sup> Significantly different at .05 level.

<sup>#</sup> Significantly different at .10 level.